



PTO/SB/08A (10-01)

Approved for use through 10/31/2002. OMB 0651-0031

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Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 1 of 5

**Complete if Known**

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| Application Number     | 10/026,934        |
| Filing Date            | December 18, 2001 |
| First Named Inventor   | Alan Sullivan     |
| Art Unit               | 2673              |
| Examiner Name          |                   |
| Attorney Docket Number | 30231/32          |

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Technology Center 2600**U.S. PATENT DOCUMENTS**

| Examiner<br>Initials* | Cite<br>No. <sup>1</sup> | Document Number                            | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines, Where<br>Relevant Passages or Relevant<br>Figures Appear |
|-----------------------|--------------------------|--|--------------------------------|--|---|
|                       |                          | Number - Kind Code <sup>2</sup> (if known) |                                |  |   |
| M.S.                  |                          | US- 3,585,381                              | 06-15-1971                     | Hodson et al.                                      |   |
|                       |                          | US- 3,600,060                              | 08-17-1971                     | Kettering et al.                                   |   |
|                       |                          | US- 3,620,889                              | 11-16-1971                     | Baltzer  |   |
|                       |                          | US- 3,650,603                              | 03-21-1972                     | Heilmeier et al.                                   |   |
|                       |                          | US- 3,680,950                              | 08-01-1972                     | Haas et al.  |   |
|                       |                          | US- 3,711,713                              | 01-16-1973                     | Wysocki et al.                                     |   |
|                       |                          | US- 3,795,529                              | 03-05-1974                     | Cartmell et al.                                    |   |
|                       |                          | US- 3,816,786                              | 06-11-1974                     | Churchill et al.                                   |   |
|                       |                          | US- 3,871,904                              | 03-18-1975                     | Haas et al.  |   |
|                       |                          | US- 3,885,982                              | 05-27-1975                     | Ferguson   |   |
|                       |                          | US- 3,891,307                              | 06-24-1975                     | Tsukamoto et al.                                   |   |
|                       |                          | US- 3,947,183                              | 03-30-1976                     | Haas et al.  |   |
|                       |                          | US- 3,969,264                              | 07-13-1976                     | Davis  |   |
|                       |                          | US- 4,022,706                              | 05-10-1977                     | Davis  |   |
|                       |                          | US- 4,070,912                              | 01-31-1978                     | McNaughtan, deceased et al.                        |   |
|                       |                          | US- 4,077,260                              | 03-07-1978                     | Gray et al.  |   |
|                       |                          | US- 4,252,417                              | 02-24-1981                     | Scheffer et al.                                    |   |
|                       |                          | US- 4,408,201                              | 10-04-1983                     | Harada   |   |
|                       |                          | US- 4,447,132                              | 05-08-1984                     | de Zwart   |   |
|                       |                          | US- 4,835,712                              | 05-30-1989                     | Drebin et al.                                      |   |

**FOREIGN PATENT DOCUMENTS**

| Examiner<br>Initials* | Cite<br>No. <sup>1</sup> | Foreign Patent Document   | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines,<br>Where Relevant Passages<br>or Relevant Figures Appear | T <sup>6</sup> |
|-----------------------|--------------------------|---|--------------------------------|--|---|----------------|
|                       |                          | Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known) |                                |  |   |                |
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|   |   |    | Art Unit                 | 2673                   |          |
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| Sheet   | 2 | of | 5                        | Attorney Docket Number | 30231/32 |

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| U.S. PATENT DOCUMENTS |                       |  |                                |  |   |
|-----------------------|-----------------------|--|--------------------------------|--|---|
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|                       |                       | Number - Kind Code <sup>2</sup> (if known) |                                |  |   |
| M.S.                  |                       | US- 4,879,668                              | 11-07-1989                     | Cline et al.                                       |   |
|                       |                       | US- 5,005,578                              | 04-09-1991                     | Greer et al.                                       |   |
|                       |                       | US- 5,090,789                              | 02-25-1992                     | Crabtree   |   |
|                       |                       | US- 5,201,035                              | 04-06-1993                     | Stytz et al.                                       |   |
|                       |                       | US- 5,251,048                              | 10-05-1993                     | Doane et al.                                       |   |
|                       |                       | US- 5,317,689                              | 05-31-1994                     | Nack et al.  |   |
|                       |                       | US- 5,384,067                              | 01-24-1995                     | Doane et al.                                       |   |
|                       |                       | US- 5,437,811                              | 08-01-1995                     | Doane et al.                                       |   |
|                       |                       | US- 5,453,863                              | 09-26-1995                     | West et al.  |   |
|                       |                       | US- 5,493,430                              | 02-20-1996                     | Lu et al.  |   |
|                       |                       | US- 5,497,453                              | 03-05-1996                     | Megahed et al.                                     |   |
|                       |                       | US- 5,499,323                              | 03-12-1996                     | Doi et al.   |   |
|                       |                       | US- 5,552,934                              | 09-03-1996                     | Prince   |   |
|                       |                       | US- 5,570,216                              | 10-29-1996                     | Lu et al.  |   |
|                       |                       | US- 5,572,375                              | 11-05-1996                     | Crabtree, IV                                       |   |
|                       |                       | US- 5,594,652                              | 01-14-1997                     | Penn et al.  |   |
|                       |                       | US- 5,594,842                              | 01-14-1997                     | Kaufman et al.                                     |   |
|                       |                       | US- 5,636,044                              | 06-03-1997                     | Yuan et al.  |   |
|                       |                       | US- 5,644,330                              | 07-01-1997                     | Catchpole et al.                                   |   |
|                       |                       | US- 5,668,614                              | 09-16-1997                     | Chien et al.                                       |   |

| FOREIGN PATENT DOCUMENTS |               |   |                                |  |   |                |
|--------------------------|---------------|---|--------------------------------|--|---|----------------|
| Examiner<br>Initials*    | Cite<br>No. 1 | Foreign Patent Document   | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines,<br>Where Relevant Passages<br>or Relevant Figures Appear | T <sup>6</sup> |
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| Examiner Signature | Mane H. Sca | Date Considered | 3/10/04 |
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|   |                        | Art Unit                 | 2673              |
|   |                        | Examiner Name            |                   |
| Sheet 3 of 5  | Attorney Docket Number | 30231/32                 |                   |

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| m.s.                           |                       | US- 5,671,136                              | 09-23-1997                     | Willhoit, Jr.                                      |   |
|                                |                       | US- 5,684,935                              | 11-04-1997                     | Demesa, III et al.                                 |   |
|                                |                       | US- 5,691,795                              | 11-25-1997                     | Doane et al.                                       |   |
|                                |                       | US- 5,695,682                              | 12-09-1997                     | Doane et al.                                       |   |
|                                |                       | US- 5,734,384                              | 03-31-1998                     | Yanof et al.                                       |   |
|                                |                       | US- 5,745,197                              | 04-28-1998                     | Leung et al.                                       |   |
|                                |                       | US- 5,748,277                              | 05-05-1998                     | Huang et al.                                       |   |
|                                |                       | US- 5,766,694                              | 06-16-1998                     | West et al.  |   |
|                                |                       | US- 5,807,448                              | 09-15-1998                     | Nakazawa   |   |
|                                |                       | US- 5,831,623                              | 11-03-1998                     | Negishi et al.                                     |   |
|                                |                       | US- 5,847,711                              | 12-08-1998                     | Kaufman et al.                                     |   |
|                                |                       | US- 5,847,798                              | 12-08-1998                     | Yang et al.  |   |
|                                |                       | US- 5,907,312                              | 05-25-1999                     | Sato et al.  |   |
|                                |                       | US- 5,929,960                              | 07-27-1999                     | West et al.  |   |
|                                |                       | US- 6,034,752                              | 03-07-2000                     | Khan et al.  |   |
|                                |                       | US- 6,061,107                              | 05-09-2000                     | Yang et al.  |   |
|                                |                       | US- 6,104,448                              | 08-15-2000                     | Doane et al.                                       |   |
|                                |                       | US- 6,133,895                              | 10-17-2000                     | Huang  |   |
| m.s.                           |                       | US- 6,154,190                              | 11-28-2000                     | Yang et al.  |   |
|                                |                       | US- 6,204,835                              | 03-20-2001                     | Yang et al.  |   |

| FOREIGN PATENT DOCUMENTS |                          |   |                                |  |   |                |
|--------------------------|--------------------------|---|--------------------------------|--|---|----------------|
| Examiner<br>Initials*    | Cite<br>No. <sup>1</sup> | Foreign Patent Document   | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines,<br>Where Relevant Passages<br>or Relevant Figures Appear | T <sup>6</sup> |
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| Examiner Signature | Mans - Jr. Scie | Date Considered | 3 10 04 |
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| <b>Filing Date</b>            | December 18, 2001 |
| <b>First Named Inventor</b>   | Alan Sullivan     |
| <b>Group Art Unit</b>         | 2673              |
| <b>Examiner Name</b>          |                   |
| <b>Attorney Docket Number</b> | 30231/32          |

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